

Radiation

Safety

Committee

Minutes of Committee review of February 8, 2000

Fence Around RHIC

Present: L. Ahrens, Peter Cirnigliaro, W. MacKay, E.T. Lessard, A. Etkin, J.W. Glenn, C. Schaefer, R. Miltenberger, A. Stevens, W. VanAsselt, and D. Beavis

Motivation: A fence is being installed around the RHIC Ring. The layout of the fence and the posting for the fence were discussed.

The layout of the fence is shown in drawing d14-1655 (see attachment 1). The fence encompasses the ring. Building 1005 is outside the fence layout. This allows people to access building 1005 without the training necessary to enter the fence.

The C-A operations for RHIC beam can start with the fence incomplete. The amount of beam in the collider will depend on the status of the fence. Items required for beam operations without the fence complete will be designated as startup1. Required items which take credit for the fence are designated startup2. An operations procedure must be written and reviewed which explains how the levels in uncontrolled areas will be maintained below 5mrem/hr and an integrated exposure of less than 100 mrem in uncontrolled areas. **(CK-RHIC-startup1-01)**. L. Ahrens, J.W. Glenn, and W. MacKay should convey this requirement to the commissioners, and an RSC subgroup will review the final procedure that is developed. The estimates for potential exposure should be based on the casim estimates. Estimates based on methods described by Tesch are about a factor of 2 lower (see attachment 2). The potential exposure near certain vents could be a factor of 2 higher but are considered within the error of the calculations. An operations procedure must be written and reviewed which designates how levels are maintained below the required standards for the controlled area within the RHIC perimeter fence. **(CK-RHIC-startup2-01)**

The final drawing needs to be signed before credit can be taken for the fence. **(CK-RHIC_startup2-02)**

The fence must be posted. It will be posted as a controlled area. The posting must be spaced less than 40 feet apart to agree with 10cfr835. **(CK-RHIC-startup2-03)**

After the meeting a sign which RCD has had made was shown to committee members. The sign meets the requirements for posting and has the generic phrasing "For entry, you must have radiological training or be escorted by a trained individual." The consensus was that the sign was acceptable. Most committee members appreciated the generic wording, which allows the training nomenclature to change without the need to change the posting.

The committee discussed the access points through the fence. The consensus was that these access points should not have any additional barriers, such as ropes or chains across them. All access points must be posted as per the radcon manual **(CK-RHIC-startup2-04)**. The access points which are roads should have signs appropriately sized for the drivers to read. These signs require further review **(CK-RHIC-startup2-05)** and should be compared to appropriate DOT standards. The consensus was to have lights or flashing lights on the signs (this should be revisited in the review of the road signs).

Attachments:

- 1) Drawing d14-1655 (file only)
- 2) Handout provided by A. Stevens (file copy)